STATEMENT OF L. ROBERT SHELTON
EXECUTIVE DIRECTOR
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
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COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION
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Mr. Chairman and Members of the Subcommittee, thank you for this opportunity to testify on child booster seats. I also want to take this opportunity to thank you, Mr. Chairman, for raising awareness about the leading killer of children in America, motor vehicle crashes, and for your sponsorship of legislation to improve child passenger safety. We are working hard to implement that legislation, now a part of the Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act, enacted last November.

Traffic crashes are the leading cause of death for children of every age from 5 to 16 years old. Six out of 10 children who die in passenger motor vehicle crashes are either not restrained at all or are improperly restrained. The single most effective way to protect children in the event of a crash is to ensure that they are properly restrained in the rear seat in appropriate restraint systems on every trip. For children from 4 to 8 years old, booster seats, properly used, can help prevent injury by making adult-sized seat belts fit correctly.

WHEN TO USE A BOOSTER SEAT

> Booster seats are intended to be used as a transition to lap and shoulder belts by children who have outgrown forward-facing child safety seats. Children outgrow the weight and height limits of most forward-facing child safety seats at around 4 years of age, when they weigh about 40 pounds and are about 40 inches tall. At that time, they should be moved to a booster seat to help the lap and shoulder belt fit correctly. Based on current data, NHTSA believes children should stay in booster seats until they reach about 80 pounds, and a height of four feet, nine inches.

Booster seats help prevent injury to children between 40 to 80 pounds. Without a belt-positioning booster seat, the lap belt can ride up over the stomach and the shoulder belt can cut across the neck. In a crash, this could cause serious or even fatal injuries. With a booster seat, the lap and shoulder belts fit correctly, reducing the risk of belt-induced injury during a crash. Correct fit also reduces the chance of ejection during a crash.

WHY IS BOOSTER SEAT USE SO LOW?

Unfortunately, few children who could benefit from booster seats use them. Most studies show booster seat use rates below 10 percent. Survey data show that these children often use seat belts instead, or ride totally unrestrained.

In 1998, NHTSA included questions about booster seat use in a telephone survey of a randomly selected national sample of about 4,000 persons age 16 and older. A selected subgroup of this sample, parents or caregivers of children under the age of 6, were asked if they were *aware* of booster seats. While 76 percent of these participants said they were aware of booster seats, 21 percent said they had not heard of them and 3 percent were unsure. Of those who were aware of booster seats, 53 percent said they had used them at some time for their children.

The survey confirmed that children who should be in booster seats often use seat belts instead. While most participants thought children in rear-facing seats were expected to move on to other safety seats, 14 percent expected their older child to use seat belts. Slightly more than half (55 percent) said that when children outgrow a child safety seat they would use a different seat or booster seat while 43 percent answered either that the children would graduate to seat belts or that they did not know what would happen.

Premature use of seat belts by a child can cause significant injury in a crash. A recent research project conducted for NHTSA by TraumaLink, The Children's Hospital of Philadelphia, concludes that many parents and caregivers simply do not understand the risk that adult seat belts can pose to children who weigh between 40 and 80 pounds. They also do not understand that booster seats are designed to remedy this problem.

The project identified several barriers to use of booster seats, including child behavior; child discomfort; availability and cost; and gaps in State child passenger safety and seat belt use laws. Potential strategies to overcome these barriers focused on educational efforts needed to inform parents and caregivers on the benefits of booster seats and when to transition the child to seat belts.

The matter of State law drew particular comment in the project report. The report found that gaps in State child passenger safety laws and seat belt use laws promote low booster seat use rates and premature graduation of children from safety seats to seat belts. For example, in many States, children over the age of 4

can legally ride unrestrained in the rear seat because these laws apply only to front seat occupants.

Since 1985, all 50 States and the District of Columbia have adopted child restraint laws. All of these laws are primary laws (which means that a law enforcement officer may stop a vehicle solely for restraint law violations) and require that young children be properly secured in a child safety seat. Though child restraint laws have helped to increase the use of child restraints, they often fail to conform to current best practices. For example, some States permit children as young as two years of age to be restrained in a seat belt if the child is in the rear seat, while others have no restraint requirements for any rear-seat occupants other than for children under a specified age. In most States, children older than 4 are covered by seat belt laws (most of which are secondary enforcement laws), not child restraint laws-a matter that contributes to premature use of seat belts.

The project also found that parents and caregivers rely on State child restraint laws for instruction and guidance. They believe that these laws are an accurate guide for what is recommended to be safe for their children; but, many State laws do not provide such a guide. To date, only two States, California and Washington, require the use of booster seats. These laws require booster seat use only for children to age 6 or 60 pounds.

Late last year, NHTSA provided technical assistance to the DaimlerChrysler Corporation for a survey on parental attitudes and expectations about State child restraint laws. Among the survey's conclusions - released early this month - was the finding that parents are confused about when children may safely ride in an adult safety belts and the exact purpose of booster seats. The survey's findings have reinforced the continuing need to make the purpose, use and details of booster seats a top agency priority.

WHAT NHTSA IS DOING: Motor Vehicle Safety Initiatives

NHTSA is taking a number of steps to improve existing standards for the performance and testing of booster seats. Federal Motor Vehicle Safety Standard (FMVSS) 213, "Child Restraints," establishes performance and structural integrity requirements for booster seats. These requirements provide for dynamic tests of the seats in 3-point lap and shoulder belts that can restrain children weighing up to 50 pounds.

In accord with the TREAD Act, we are considering whether to amend the Standard to cover child restraints for children weighing up to 80 pounds. Though NHTSA recommends the use of booster seats for children up to 80 pounds, and many child restraint manufacturers now certify booster seats up to 80 pounds and higher, we currently test booster seats with a dummy that simulates a 6-year-old child. At this time, we do not have an acceptable test dummy larger than our 47-

pound 6-year-old dummy and smaller than our 95- 105-pound 5th percentile female dummy.

To acquire a test dummy suitable for evaluating booster seats designed for larger children, NHTSA has been working with the Society of Automotive Engineers (SAE) to develop a 10-year-old child dummy, which would be approximately 4-feet 6-inches tall and weigh 71 pounds. We expect to have a prototype of the 10-year-old dummy to evaluate by June 2001, but incorporation of the dummy's specifications into our standards will require further testing and rulemaking. As an interim measure, we are assessing the approach of adding weights to the existing 6-year-old dummy to evaluate the performance of booster seats for larger children. However, the primary concern for older children is head excursion which is influenced by the height of the dummy. Thus, adding weight to a 6-year-old dummy is not a satisfactory long-term solution.

NHTSA is currently conducting a study, as required by the TREAD Act, on the use and effectiveness of booster seats. This study is hampered, however, by the lack of use of booster seats by older children, which makes it hard to find enough crash cases with booster seats to give reasonable estimates of their effectiveness. This study will be completed this November.

In addition to setting and maintaining Federal motor vehicle safety standards, NHTSA conducts compliance tests to assure that the standards are met. We generally test every child restraint model available on the market each year for compliance with FMVSS No. 213. From 1996 to the present, NHTSA has conducted compliance tests on 63 models of booster seats. In 1998, we sent a letter to all child safety seat manufacturers urging them to manufacture child seats so that they "perform well beyond the minimum requirements of our standard." We can also conduct investigations and seek a recall if there is evidence that these restraints contain a safety-related defect.

WHAT NHTSA IS DOING: Education and Information Initiatives

In addition to NHTSA's motor vehicle safety initiatives to improve booster seats, we are continually examining ways to expand our educational efforts to give parents, caregivers and others the information they need to determine the correct use of all child safety seats. These efforts include initiatives to raise awareness and increase the use of booster seats.

The agency has four strategies that have been determined to be especially effective in meeting child passenger safety goals: public education; high visibility law enforcement; public-private partnerships; and strong legislation.

In1998, NHTSA sponsored a "Blue Ribbon Panel" of experts to recommend better ways to protect children passengers 4 to16 years old. In March 1999, the panel presented recommendations for these children in three areas:

- *Marketing and Public Education* - Educate parents and caregivers on the importance of booster seats for children who have outgrown child safety seats; generate peer programs for increasing seat belt use among older children.

- *Legislation and Enforcement*- Close gaps in the child passenger safety and seat belt laws that leave children ages 4 to 16 unprotected; encourage high visibility enforcement of child passenger safety laws.

- *Product Design and Implications*- Improve booster seat design for safety and comfort; develop recommendations for the use of aftermarket products.

Also in 1998, the Transportation Equity Act for the 21st Century (TEA-21) added a new incentive grant program to our occupant protection efforts. Beginning in FY 1999, TEA-21 authorized $83 million over 5 years for a two-part program to target specific occupant protection laws and programs. Under part one, a 5-year program beginning in FY 1999, States receive grants if they demonstrate that they have in place certain occupant protection laws and programs, such as a child passenger protection law that requires minors to be properly secured in an appropriate restraint system. Under part two, a 2-year program in FY 2000 and 2001, States receive grants if they carry out child passenger protection and education activities, including activities on the use of booster seats.

Since 1998, NHTSA and AAA have jointly published a brochure, *Buying a Safer Car for Child Passengers*, designed to help consumers make an informed decision when purchasing a family vehicle. The brochure, which is updated annually to include safety features available on new model year vehicles, highlights information on booster seats.

In 1999, to address the issue of non-use of booster seats, NHTSA awarded a total of $800,000 to six States and communities (NY, RI, TX, WA, AZ, ND) for pilot and demonstration programs to increase booster seat use for children between age 4 and 8 years old and seat belt use among older children. Using final reports on these programs, due at the end of 2001, NHTSA will develop "best practices" strategies and educational materials for the use of the States and our national partner organizations.

In February 2000, in response to one of the Blue Ribbon Panel's recommendations, NHTSA launched *Don't Skip a Step*, a national booster seat campaign to educate parents and caregivers not to skip any step as their children grow: beginning with rear-facing infant seats and progressing to forward-facing child safety seats, booster seats, and properly restrained in an adult belt in the back seat for all children 12 and under. As part of the campaign, NHTSA has distributed campaign brochures to enlist the support of child safety advocates, health care providers, law enforcement personnel and others to help spread the

booster seat safety message across the country. An expanded booster seat education program is planned for later this year. In addition, raising booster seat awareness has been the centerpiece of NHTSA's "National Child Passenger Safety Week" campaign for the last several years.

We will continue to implement our booster seat initiatives by updating NHTSA's legislative fact sheets, which provide technical assistance to the States. In addition, we are developing a booklet, *Protecting America's Children: The Case for Strong Child Passenger Safety Laws,* which will be completed this summer, to highlight the need to close gaps in State child passenger safety laws discussed earlier. In January 2001, the National Committee on Uniform Traffic Laws and Ordinances developed a model law on occupant protection that provides coverage for all occupants in all seating positions.

NHTSA has been a close partner in the development and refinement of the "Boost America!" program sponsored by Ford Motor Company. This $30-million program, to be launched at the end of this month, will give away a million booster seats during the program's first 12 months, and award $1 million in grants to local organizations to support grassroots booster seat advocacy and distribution efforts. In addition, the program will distribute pre-school and elementary school educational materials promoting booster seat use. NHTSA plans to continue to work with child safety seat manufacturers and retailers to raise consumer awareness of booster seats.

NHTSA's web site, http://www.nhtsa.dot.gov/, now contains a separate section on "Child Safety Seats," that makes it easy for the public to locate and obtain specific information on all child seats, including booster seats. This new Internet-based service, launched last month by Secretary Mineta, is designed to help families obtain the latest child safety seat information and guide parents and caregivers to the right restraint choices for their children. When a user clicks on the icon, "Child Safety Seats," the user is linked to a comprehensive source of information, tips and recommendations. Dozens of full-color photos of the different types of child safety seats are provided, together with step-by-step installation guidelines. This site provides one-stop shopping to those who want to learn about the correct use and installation of all child safety seats, and includes: (1) a current listing of all new child safety seats available; (2) a list of model year 2001 vehicles with child safety seat features; (3) a description and list of various features available on the restraints that may make them easier to use and install; and (4) a child safety seat dictionary of terms. The site also has links to a comprehensive list of locations throughout the country where parents and caregivers can have child safety seats and booster seats inspected, and to the brochure, *Buying a Safer Car for Child Passengers*, mentioned earlier.

Additional information on booster seats also is available toll-free through NHTSA's Auto Safety Hotline, 1-888-DASH-2-DOT. Our Hotline operators are

available to answer questions from 8 a.m. to 10 p.m., Eastern time, Monday through Friday. Messages can be left on tape 24 hours a day.

NHTSA currently is developing a 5-year booster seat education strategic plan, as required by the TREAD Act, to reduce deaths and injuries caused by failure to use the appropriate booster seat in the 4- to 8-year-old age group by 25 percent. Booster seat use will be monitored using NHTSA's databases. We will complete the plan by November of this year.

In closing, I would like to note that NHTSA staff have been active participants at the Association for the Advancement of Automotive Medicine's (AAAM) Conference on "Booster Seats for Children," taking place this week in Washington, DC. This conference has brought together international experts in pediatric restraint science from Canada, Sweden, the United States, the United Kingdom and Germany to review the current state of the art in child booster seat design, materials, tolerances and child riding behavior. The proceedings of the conference will be published to serve as a guide to future research in child safety engineering, provide recommendations for the medical community, and address the formulation of effective restraint laws for 4- to 8-year old children.

Mr. Chairman, this concludes my statement. I will be pleased to answer any questions.

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